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REMARKS

Applicant has amended claims 4-9 and 14. No new matter has been introduced.

Attached is a marked-up version of the changes being made by the current amendment.

Applicant asks that all claims be examined. Please apply any charges to Deposit Account No. 06-1050.

Respectfully submitted,

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## Version with markings to show changes made

## In the claims:

Claim 4, 5, 6, 7, 8, 9, and 14 has been amended as follows:

- 4. (Amended) A method as set forth in [any one of the preceding claims] claim 1, characterized by the further step of initially assigning a different binary code to each unique value of each data variable in said database and storing the data records in binary-code form.
- 5. (Amended) A method as set forth in [any one of the preceding claims] <u>claim 1</u>, characterized by the further steps of initially identifying all data tables in said database that have variables in common, and assigning virtual connections between such data tables, thereby creating a database with a snowflake structure, wherein said connecting tables are located between said boundary tables in said snowflake structure.
- 6. (Amended) A method as set forth in [any one of the preceding claims] <u>claim 1</u>, characterized by the further steps of identifying all calculation variables for which the number of occurrences of each value is necessary for correct evaluation of said mathematical function, defining a subset of data tables consisting of boundary tables containing such variables and data tables connecting such boundary tables, electing said starting table from said subset, and including data on said number of occurrences of each value in said conversion structure.
- 7. (Amended) A method as set forth in [any one of the preceding claims] <u>claim 1</u>, characterized in that said starting table is the data table among said boundary and connecting tables having the largest number of data records.
- 8. (Amended) A method as set forth in [any one of the preceding claims] <u>claim 1</u>, characterized by the further step of building said final data structure, which includes a

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> number of data records, each of which contains a field for each selected classification variable and an aggregation field for said mathematical function, wherein said building step includes sequentially reading a data record of said starting table, creating a current combination of values of said selected variables by using said conversion structure to concert each value of each connecting variable in said data record into a value of at least one corresponding selected variable, evaluating said mathematical function for said current combination of values, and aggregating the result of said evaluation in the appropriate aggregation field based on the current value of each selected classification variable.

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- 9. (Amended) A method as set forth in [any one of claims 1-7] claim 1, characterized by the further step of creating a virtual data record of containing a combination of values of said selected variables, wherein said creating step includes reading a data record of said starting table and using said conversion structure to concert each value of each connecting variable in said data record into a value of at least one corresponding selected variable.
- 14. (Amended) A method as set forth in [any one of the preceding claims] claim 1, characterized in that said step of building said conversion structure includes:
- a) reading data records of a boundary table, and creating a conversion structure including a link between each unique value of at least one connecting variable in said boundary table and each corresponding value of at least one selected variable therein;
  - b) moving from said boundary table towards said starting table;
- c) if a connecting tabled is found, reading a data records of said connecting table, and substituting each unique value of said at least one connecting variable in said conversion structure for at least one corresponding unique value of at least one connecting variable in said connecting table; and
  - d) repeating steps (b) (c) until said starting table is found.